figures on which their tabulated findings are based are easy to find, the statistical methods used are clearly set out and the textual comment outstandingly good.

When rarer conditions and circumstances are studied a small scale investigation will obviously not produce answers of statistical significance. In this case, where many investigators are employed and intimate collaboration impossible, it is important that only a few aspects of health and environment should be studied and that these should admit of precise definition.

J. P. M. TIZARD

EVOLUTION

Maynard Smith, J. *The Theory of Evolution.* Harmondsworth, 1958. Penguin Books. Pp. 320. Price 3s. 6d.

PENGUINS HAVE NOW LAUNCHED a new series of books on biology. With the first they provide us with a review of the whole vast scope of evolutionary theory, as it is in the middle of the twentieth century. A hundred years ago the concept of organic evolution quite suddenly became an important part of the thought of educated people, and for some time the general philosophical, biological and sociological implications were the main features of discussions on the subject. Nowadays a good deal of the excitement, rational or irrational, has died down. Research workers are instead studying individual examples of "micro-evolution" in detail, and using the rather new, but exceedingly rigorous, science of genetics to interpret their results. Readers of Dr. Maynard Smith's book who have an elementary acquaintance with evolutionary biology will probably be most impressed by his exposition of the genetics of populations and the analysis of the nature and origin of species; they will also be struck by the accumulation of relevant experimental work and field observation.

An important, indeed fundamental, concept—and one all too often introduced uncritically into elementary courses—is that of "adaptation". A careful reading of *The Theory of Evolution* can be strongly recommended to anyone who wishes to clarify his thoughts on this subject. An important consequence will be, not only that his knowledge will be increased, but that his appreciation of what is not known, or what is known only to be exceedingly complex, will be extended.

Both in genetics and in evolutionary theory there has been much over-simplification. This has led, among other things, to misunderstandings in the field of biology of especial interest to readers of this journal. Dr. Maynard Smith hardly deals with the evolution of human populations; but he does provide a really sound basis—otherwise unobtainable without an exhausting study of the literature—on which to build a valid system of human biology.

Teachers, undergraduates, medical men and many non-specialists will be indebted to Dr. Maynard Smith for accomplishing so difficult a task so successfully.

S. A. B.

FERTILITY

Harrison, R. G. (Editor). *Studies on Fertility 1958. Including papers read at the Conference of the Society for the Study of Fertility. Being Volume X of the Proceedings of the Society.* Oxford, 1958. Blackwell. Pp. x + 176. Price 25s.

IN THIS VOLUME the papers from the scientists predominate and are of excellent quality, purely clinical papers being limited to five. The editing is of the usual high order and the volume is of particular value in that it contains the second Oliver Bird Lecture on Fertility Control with Oral medication by Gregory Pincus. It was no small privilege to those of us on this side of the Atlantic to hear this excellent presentation by Pincus himself of the very considerable work that has gone into the development of one of the first possible means of controlling fertility by mouth. The paper gives a brief outline of the early work on animals in which ovulation in rats and rabbits was inhibited by means of progesterone and later by various 19-nor steroids which also had strong progestational actions. Later the work was extended to human beings and Dr. Pincus gives a lucid account of the various clinical studies and field trials carried out on normally menstruating women given progesterone or